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December 9, 2020

Via Electronic Filing

Steffany Powell Coker
Secretary to the Commission
Public Service Commission of Wisconsin
P.O. Box 7854
Madison, WI 53707-7854

**RE: Application of Northern States Power Company,
a Wisconsin Corporation, for Approval of
a Resiliency Service Pilot**

Docket 4220-TE-106

Attention: Mr. Martin Day

Dear Ms. Powell Coker:

Northern States Power Company, a Wisconsin Corporation (“NSPW” or “the Company”), submits to the Public Service Commission of Wisconsin (“Commission”) this application for approval of a resiliency service pilot (“Application”).

As described in this Application, the Company is proposing a pilot to provide resiliency as a service—the Resiliency Service Pilot (RS-1) (referred to herein as the “pilot”). The pilot is based in part on Xcel Energy’s experience with resiliency projects in its Colorado subsidiary, Public Service Company (“PSCo”), and is designed to support those customers that have need for higher than standard service reliability. The pilot supports customer resiliency through company ownership, installation, operation, and maintenance of Resiliency Service Assets, which may include combinations of Battery Energy Storage Systems (“BESS”) and Generation Assets, as well as switching and control equipment. The Company proposes that the pilot have a maximum subscription limit of 30 MW of combined nameplate capacity of BESS and Generation Assets, with 10 MW reserved for government or non-profit customers during the first few years of the pilot.

The Company believes the pilot will lower upfront costs for participants, and provide a positive customer experience, through customized combinations of Resiliency Service Assets that meet customers’ specific resiliency and reliability needs. Customers will pay for their requested Resiliency Service Assets through a unique on-bill charge that recovers the revenue requirement of the assets requested by each customer. Because pilot costs are recovered through dedicated customer charges, the pilot does not rely on subsidization from non-participating customers.

Specifically, the Company requests that the Commission approve the proposed Resiliency Service Pilot and associated tariff sheet.

The balance of this filing describes key features of the pilot offering. The Company also includes the following Attachments in support of this Application:

- Attachment A Resiliency Service Pilot Tariff Sheet
- Attachment B Detailed Pilot Project Management Process
- Attachment C Multiple Premise Provision Example
- Attachment D Customer Support Letters

Because customer participation in the Resiliency Service Pilot is voluntary, and this Application does not request an increase in rates or a reduction in service for non-participating customers, the Company does not believe a contested case proceeding or hearing is required. The Company respectfully requests that the Commission issue an Order approving the pilot by May 1, 2021 so that the pilot can be made available to customers in 2021.

Please call Tyrel Zich at (715) 737-2476 if you have any questions regarding this filing. All correspondence concerning this filing should be sent to each of the following:

Tyrel Zich
Xcel Energy
1414 West Hamilton Avenue
Eau Claire, WI 54702

Mara K. Ascherman
Xcel Energy
414 Nicollet Mall, 401-08
Minneapolis, MN, 55401

Sincerely,

A handwritten signature in black ink, appearing to read 'Karl J. Hoesly', with a large, sweeping underline.

Karl J. Hoesly
Regional Vice President, Rates and Regulatory Affairs

Encl.

CC: Deborah E. Erwin
 Julie A. McRea
 Tyrel J. Zich
 Mara K. Ascherman

**BEFORE THE
PUBLIC SERVICE COMMISSION OF WISCONSIN**

Application of Northern States Power Company, a Wisconsin Corporation, for Approval of Resiliency Service Pilot	}	4220-TE-106
	}	

Pursuant to Wis. Stat. §§ 196.19 and 196.20, Northern States Power Company, a Wisconsin Corporation (“NSPW” or “the Company”), a wholly owned subsidiary of Xcel Energy Inc. (“Xcel Energy”), submits this request for approval of a resiliency service pilot (the “Application”). In support of the Application, NSPW respectfully states the following:

A. Background:

Resiliency as defined by Merriam-Webster means “an ability to recover from or adjust easily to adversity or change.” In the electric system, this specifically refers to the ability to recover from or adjust to disruptions in the supply of electricity. The concept of resiliency in the electric system is becoming more relevant as, across the country, customers seek to navigate the risks of weather events or other significant disruptions. Resiliency strategies are designed to address anticipated severe electric disruptions to day-to-day life or a customer’s operations by investing in critical infrastructure and systems to sustain the customer during electric disruption, and to hasten recovery. One of the most critical objectives of a resiliency strategy is ensuring a secure power supply for critical infrastructure. Installing on-site energy generation, battery storage, and/or control equipment can allow a critical site or a customer’s critical loads to operate independently from the electric grid in the event of an emergency resulting in extended grid outage. These resources may also provide customer benefits during times of normal grid operation, as described in section C below.

NSPW has heard from several Wisconsin customers with a desire for increased resiliency. These customers each have their own needs and unique circumstances, but common threads run through many of the discussions. Some communities, either through governmental initiatives or public-private partnerships, are establishing or increasing their focus on “resiliency centers” to maintain stable functioning of society during and immediately following a major disruption or weather event. For municipalities these resiliency centers are often existing structures, services and/or facilities considered crucial to the community (first responder facilities, wastewater treatment facilities, evacuation and shelter areas, communications and traffic safety infrastructure, etc.). In addition to the provision of security, food, shelter, and water, a key aspect of community resiliency centers is a stable and secure power supply. Commercial and industrial customers are also increasingly considering resiliency options in order to meet both their reliability and power quality needs, often while also meeting sustainability objectives. These commercial and industrial customers often have sophisticated operations that do not tolerate grid outages (data centers, manufacturing, etc.) or serve essential community functions (healthcare, education, etc.). Each customer is unique, but generally these customers are seeking increased resiliency at a reasonable price, with a desire to maximize the potential for resiliency assets to save money, and to rely on a trusted provider to help them achieve these goals.

Xcel Energy has limited, but very relevant experience offering customers resiliency services. Through the Innovative Clean Technology (“ICT”) program, Public Service Company (“PSCo”), the Colorado subsidiary of Xcel Energy, built the Panasonic Battery Storage Microgrid

demonstration project (the “Panasonic project”). This system has been operating successfully since its completion in 2017. The Panasonic project, located near the Denver International Airport, combined a 1.4 MW solar photovoltaic (“PV”) resource, a 1 MW-2 MWh¹ battery storage resource, and microgrid switching to demonstrate how battery storage can be integrated into the electric grid. The microgrid portion of the Panasonic project allows a Battery Energy Storage System (“BESS”) to form a grid in the event of a grid outage with power restored to the customer in less than eight seconds. The Panasonic project microgrid successfully created an islanded grid outside of testing for the first time in March 2020, due to a storm-related outage on the feeder. The battery has also demonstrated the ability to respond to sudden changes in production of the on-site solar PV resource. The Panasonic project has demonstrated several grid and customer values including grid integration of high-penetration solar PV, system peak demand reduction, energy arbitrage, frequency regulation, and back-up service to an end-use customer in case of grid outage. This project’s success has led to proposals for seven additional projects in Colorado as part of PSCo’s proposed Community Resiliency Initiative which were recently approved by the Public Utilities Commission of Colorado.²

Many of the lessons learned in the design, construction, and operation of the Panasonic project have been integrated into the conceptual discussions to date with a number of potential customers of this proposed Resiliency Service Pilot (RS-1) (the “pilot”). The pilot is designed to support those NSPW customers that have need for higher than standard service reliability. The pilot supports customer resiliency through Company ownership, installation, operation, and maintenance of Resiliency Service Assets which may include combinations BESS and Generation Assets including but not limited to Back-Up Generation (“BUG”) and Solar PV when paired with a BESS. Under the Company’s proposal, Resiliency Service Assets will be located on or near a customer’s premise(s) serving load located behind a single customer meter.

Planning for resiliency continues to emerge as an important issue for NSPW’s communities and commercial and industrial customers, and the Company is pleased to help demonstrate how emerging technologies such as solar and storage can play an important role in helping support critical facilities. In the future, projects like those undertaken by the Company and customers as part of this pilot may help inform the Company’s distribution planning process through the consideration of non-wires alternatives. The Company believes the pilot will lower upfront costs for participating customers and provide a positive customer experience through customized combinations of Resiliency Service Assets that meet customers’ specific resiliency and reliability needs. Pilot participants would pay for all pilot costs through dedicated customer charges and would receive all benefits. Customers will pay for their requested Resiliency Service Assets through a unique on-bill charge that recovers the revenue requirement of the assets requested by each customer. Because pilot costs are recovered through dedicated customer charges, the pilot does not rely on subsidization from non-participating customers.

¹ MW, a power unit, expresses the maximum amount of electricity a storage resource can provide at any given moment. Storage resources are additionally expressed in terms of MWh, an energy unit, which measures the number of hours a storage system can deliver its rated MW capacity. As an example, a 1 MW-2 MWh system can deliver 1 MW of power for 2 hours.

² See PSCo’s Community Resiliency Initiative in Colorado Public Utility Commission proceeding no. 19A-0225E.

Based on Xcel Energy's experience with other resiliency projects as well as other customer programs, and conversations with Wisconsin customers, the Company has worked to develop a pilot offering that can support some, but likely not all, resiliency needs of the Company's Wisconsin customers. Several program design aspects build upon previously approved customer programs, including NSPW's recently approved electric vehicle service programs.³

NSPW has focused on establishing program terms and conditions for the Resiliency Service Pilot that:

- Minimizes/avoids subsidization by other customers
- Promotes fairness
- Enables participation by a variety of different types of customers
- Addresses the complexity and custom nature of resiliency projects
- Are technology- and provider-neutral
- Facilitates deployment of new and innovative technology
- Maximizes benefits to participating customers
- Minimizes administrative costs and burdens while delivering value for customers

In addition to feedback from Wisconsin customers and lessons learned from other Xcel Energy projects and programs, the Resiliency Service Pilot reflects many of the goals and recommendations adopted by the Wisconsin Energy Distribution and Technology Initiative ("WEDTI"). WEDTI brought together a broad group of stakeholders from July 2019 through July 2020 to "define the role that technology can play in the Wisconsin energy distribution system of the future," and "make recommendations to policy makers on changes to the system that would best position Wisconsin businesses and utility customers to thrive as part of that system."⁴ The WEDTI initiative resulted in 14 recommendations, several of which are directly relevant to the Resiliency Service Pilot NSPW is proposing in this Application. While not specifically designed to achieve the very detailed recommendations in the WEDTI report, NSPW believes that its Resiliency Service Pilot will help the Company, its customers, the Commission, and other stakeholders to gain experience with innovative technology and projects through this pilot that will be helpful to achieve the following WEDTI recommendations:

- Position Utilities as Conductors (Recommendation #1)
- Update Interconnection Rules (Recommendation #2)
- Establish an Innovative Technologies Initiative (Recommendation #3)
- Encourage Utility-Stakeholder Collaboration (Recommendation #4)
- Shape Energy Consumption to Achieve Utility and State Goals (Recommendation #8)
- Participate in Developing Changes to MISO Market Rules (Recommendation #11)
- Act Quickly (Recommendation #13)
- Provide Economic Stimulus (Recommendation #14).

The Company notes that its pilot is also consistent with recommendations discussed by Governor Evers' Task Force on Climate Change.

³ See PSCW Docket No. 4220-TE-104.

⁴ WEDTI Final Report, p. 4. Available at < <https://www.betterenergy.org/wp-content/uploads/2020/07/Wisconsin-Energy-Distribution-and-Technology-Initiative.pdf>>.

B. Pilot Design:

1. Eligibility and Pilot Cap

The pilot is available to customers served under Rate schedules Cg-7, Cp-3, Cg-9, Cp-1, RTP-1, and Mp-1 who take service from a single metering point.⁵ The pilot has a maximum subscription limit of 30 MW Alternating Current (AC) of combined nameplate capacity of BESS and Generation Assets, with 10 MW reserved for government or non-profit customers until December 31, 2025. If the 10 MW is not utilized by government or non-profit customers by December 31, 2025, the Company proposes that the reservation be lifted at that time so that all remaining available capacity for the pilot is available to any qualifying customer. The Company believes the 30 MW cap provides enough capacity for the pilot to remain open to potential customers for the foreseeable future. It is difficult to estimate the number of projects or customers that will participate in the pilot before the 30 MW cap is met as project sizes may vary greatly. The cap can be adjusted and revised as necessary in subsequent filings or rate cases.

2. Resiliency Service Assets

Participation in the pilot is voluntary and customers select the Resiliency Service Asset(s) that meet their resiliency needs. The following section describes the Resiliency Service Assets available to customers under this pilot. Resiliency Service Assets will be owned by the Company for a 10-year term described in the Customer Service Agreement (“CSA”) after which point ownership will be transferred to the customer. To the extent practicable, the Company shall, via the CSA, provide or arrange to provide the benefits of any applicable warranties provided to the Company for the Resiliency Service Assets to the customer.

- a. BESS – The Company will install, operate, and maintain on-site BESS to allow customers to operate independently from the electric grid in the event of an emergency resulting in grid outage. The Company may also install, operate, and maintain additional equipment to accomplish automatic switching and control of Company or customer owned BESS interconnected to customer systems or the Company’s distribution system.

Customers shall pay a monthly amount for the BESS and additional metering, switching, and control facilities in accordance with the RS-1 tariff. Customers will be required to pay a Resiliency Charge for the BESS and related facilities for the term specified in the CSA, as discussed below.

Unless otherwise specified in the CSA, each BESS will be separately metered to ensure accurate billing according to the applicable Parallel Generation tariff and to provide operational insight for the Company and customer to ensure each BESS is being dispatched according to the operation and maintenance terms of the CSA.

⁵ Customers that have premises that are in close physical proximity but served by more than one meter may be eligible to combine those premises behind a single meter as part of the Resiliency Service Pilot under the Multiple Premises Provision.

Additional metering will be chargeable to the customer according to metering charges outlined in the RS-1 tariff.

- b. Generation Assets – The Company will install, operate, and maintain on-site Generation Assets, including but not limited to Solar PV and BUG Assets, to power a BESS or otherwise to allow customers to operate independently from the electric grid in the event of an emergency resulting in grid outage. Unless otherwise specified in the CSA, the Generation Assets must have dedicated metering for informational purposes and to quantify the customer benefits during normal grid operations as determined in the CSA. The Company shall also install, operate, and maintain additional equipment to accomplish automatic switching and control of Company or customer owned Generation Assets interconnected to customer systems or the Company's distribution system.

Customers shall pay a monthly amount for the Generation Assets and additional metering, switching, and control facilities in accordance with the RS-1 tariff. Customers will be required to pay a Resiliency Charge for the Generation Assets and related facilities for the term specified in the CSA, as discussed below.

Generation Assets that are not dispatchable will not be installed under this pilot unless the customer also receives a BESS Resiliency Service Asset from this tariff or has an existing customer-owned behind the meter BESS interconnected in parallel to the Company's system. Generation Assets that are not dispatchable do not provide the level of resiliency that NSPW intends to provide customers through this pilot.

3. Summary of Pilot Project Management Process

Each resiliency project will be customized to meet the needs of the individual customer and will consider site-specific design considerations. There are two categories of customer projects under which the Company will provide Resiliency Service Assets within the pilot: Stand Alone Back-Up Generator, and Other Resiliency Projects. The Stand Alone Back-Up Generator category will be for customer resiliency projects that only contain a BUG and related switching and control equipment. The Other Resiliency Projects category will be for customer resiliency projects that contain any other combination of BUG, other Generation Assets, and BESS. Customer resiliency projects will follow the project management process outlined in Figures 1 and 2 and as described in detail in Attachment B.

Figure 1: Customer Project Planning

Step 1	Step 2	Step 3	Step 4	Step 5
Customer Contact	Exploratory Meeting	Preliminary Scoping	Project Request for Proposal (“RFP”)	Design and Engineering (“D&E”)
<ul style="list-style-type: none"> • Engagement through account management or customer inquiry 	<ul style="list-style-type: none"> • Meeting between customer, program manager, and account management 	<ul style="list-style-type: none"> • Preliminary project design phase and interconnection screening • Work with customer to define scope for RFP 	<ul style="list-style-type: none"> • RFP released to qualified vendors • Company and customer work together to award bid for Design and Engineering 	<ul style="list-style-type: none"> • Customer signs Design and Engineering agreement for detailed design work and interconnection process begins

Figure 2: Customer Project Construction and Operation

Step 6	Step 7	Step 8	Step 9	Step 10
Customer Service Agreement (“CSA”)	Interconnection and Permitting	Construction and Commissioning	Operation and Maintenance	End of Contract
<ul style="list-style-type: none"> • Customer accepts D&E plans and signs Customer Service Agreement • Establish construction schedule 	<ul style="list-style-type: none"> • Interconnection study and agreement through standard process 	<ul style="list-style-type: none"> • Construction through selected contractor • Company distribution extension or modification work as necessary 	<ul style="list-style-type: none"> • Asset(s) operated for customer benefits according to Customer Service Agreement • Contractor provides O&M as necessary • Regular reporting provided to customer 	<ul style="list-style-type: none"> • Transfer ownership of Resiliency Service Assets to customer • Customer responsible for decommissioning and removal at end of operable life

4. Multiple Premises and Distribution System Accommodations

In its experience discussing potential resiliency projects with customers in recent years, the Company has identified several barriers that “business as usual” presents to customers who want to pursue resiliency projects. The Company has designed several pilot terms that are specifically intended to address these barriers.

- a. Multiple Premise Provision – It is not uncommon for a commercial or industrial account to have multiple premises at a single location. Multiple premises of the same commercial or industrial customer from any of the following rate classes may be combined in order to participate in the Program as a single customer premise: Cg-1, Cg-2, Cg-7, Cp-3, Cg-9, Cp-1, RTP-1, or Mp-1.⁶ The multiple premises together must qualify for the rate schedules eligible for this tariff as described in the

⁶ The Resiliency Service Pilot is for commercial and industrial customers. Non-commercial or industrial customers, including those on Residential and Farm rate schedules Rg-1, Rg-2 and Fg-1 are not eligible for the pilot, and may not combine multiple premises for the purpose of reclassifying the customer as a commercial customer in order to participate in the pilot.

Availability section and must be served through a single meter.⁷ In cases where multiple premises participate in this pilot, the premises will be billed as a single customer from the required single meter according to the Cg-7, Cp-3, Cg-9, Cp-1, RTP-1, or Mp-1 tariff, except as described below for Optional Customer Distribution Service. If the Company owns distribution assets on the customer's side of the single meter that are not Resiliency Service Assets, the customer will be enrolled in Optional Customer Distribution Service as described below.

The Multiple Premise Provision allows a single campus of individual premises of the same customer that are in close proximity to be served through a single meter, as shown in Attachment C. This allows Resiliency Service Assets to serve multiple customer premises behind the single metering point. If customer resiliency needs include the ability of the campus to be energized when the Company's grid experiences an outage, the entire campus (or an identified portion thereof) can serve as an island with the appropriate switching and control equipment.

b. Distribution Modifications and Optional Customer Distribution Service

Customers are responsible for the cost of distribution and service modifications to take service from a single meter as an upfront Customer Contribution in Aid of Construction ("CIAC"). When applicable, new or upgrading customers will receive an Allowance according to Section 5 - Extension Rules of the Company's Rules and Regulations (Ex-1) based on the estimated load at the single metering point based on the rate at which the single metering point is billed regardless of the actual voltage of the single meter.

To facilitate the efficient installation and operation of Resiliency Service Assets, customers eligible for this pilot may elect to have the Company install, operate, and maintain distribution assets on the customer side of primary or secondary metering equipment. This option, "Optional Customer Distribution Service," allows customers to receive service at secondary voltage and be metered at primary voltage or be metered at a different point than they are currently. This service provides customers the option of having the Company own and maintain traditional utility system distribution assets behind a single metering point. Under the terms of the RS-1 tariff, customers may receive Optional Customer Distribution Service without Company ownership of any other Resiliency Service Assets.

Under the terms of the Resiliency Service Pilot, Resiliency Service Assets may be installed on or near the customer's premise and must be installed behind a single metering point. A single metering point is essential for resiliency projects to comply with terms of the Company's other tariffs for parallel generation. There may be situations where the ideal single secondary or primary metering point is not in close proximity to the customer's load, or where the metering point can provide service to multiple premises belonging to the customer, in accordance with the pilot's Multiple Premise Provision described above. In either case, the customer may have

⁷ The single metering point will be the point of metering for the purposes of the applicable parallel generation tariff.

considerable distribution assets behind that single metering point which service multiple premises and interconnect with Resiliency Service Assets.

According to Section 4.3 of the Company's Rules and Regulations "all wiring and equipment on customer's side of the point of connection, except metering equipment, shall be furnished, installed, and maintained at customer's expense...". For example, under current rules if a customer wishes to be metered at primary, they must take service from the Company at a point of connection at primary voltage which requires the customer to own secondary distribution assets. Consequently, customers must purchase secondary assets from the Company if they wish to transition from secondary to primary service, or if they wish to move their secondary metering point further out on the secondary distribution system. The Company believes the upfront cost of purchasing secondary assets and the requirement for the customer to own and operate these assets are barriers to customers pursuing resiliency projects today and is a barrier to integrating Resiliency Service Assets behind a single meter for this pilot. By offering Company ownership of assets behind secondary or primary metering, the Company can address this barrier. Company ownership of these behind-the-meter distribution assets can facilitate the formation of micro-grids, and this approach eliminates the need for customers to purchase, operate, and maintain their own distribution assets. Because this option simply involves the Company continuing to own traditional distribution assets it already owns today, and this approach only attempts to remove a barrier to projects in the future, NSPW is not proposing to place a cap on enrollment for Optional Customer Distribution Service.⁸

Customer CIACs towards these assets will be governed by Section 5 - Extension Rules of the Company's Rules and Regulations (Ex-1). Any remaining cost after the applicable Allowance is applied for providing Optional Customer Distribution Service must be paid by the customer upfront as a CIAC. To the extent customers are requesting new or upgraded service, they will receive an extension allowance based on their load according to the existing extension rules, which may offset the cost of Optional Customer Distribution Service. This is appropriate as the customer will be paying for a portion of the Company's secondary distribution system embedded in their base rates. However, customers metered at primary voltage that receive Optional Customer Distribution Service under current rules would not be paying for use of the Company's secondary distribution system, as primary rates are not designed to recover the cost of secondary distribution assets. Consequently, customers receiving Optional Customer Distribution Service will be billed as a secondary voltage Cg-7, Cp-3, Cg-9, Cp-1, RTP-1, or Mp-1 customer at the metering

⁸ As part of its Optional Customer Distribution Service, the Company is only offering to continue to own secondary distribution assets it owns today, or to build new secondary distribution assets. It is not offering to purchase secondary distribution assets that are owned by customers or other parties today, due to a variety of logistical challenges that could involve including non-standard equipment, unknown maintenance history and various liability concerns.

point regardless of the actual voltage of the single meter.⁹ Optional Customer Distribution Service participants will not be required to pay additional Program or Resiliency Charges in accordance with the RS-1 tariff.

5. Pilot Customer Costs and Charges

Customer costs will depend greatly on the resiliency needs of specific participating customers. Each customer will pay for the Resiliency Service Assets deployed to their premise and a share of program administration and management costs through the charges described below.

- a. Program Charges – Each customer participating in the pilot will pay one of two Program Charges in accordance with the RS-1 tariff according to the category of resiliency project in addition to the applicable Cg-7, Cp-3, Cg-9, Cp-1, RTP-1, or Mp-1 Customer Charge. Program Charges are paid for the term specified in the CSA as provided in Table A below. Program Charges will not be fixed in the CSA and may be updated for participating customers in future rate cases to more accurately reflect program administration costs. This charge is designed to recover dedicated Resiliency Service Pilot administration costs, primarily the labor for administration and management of the pilot. Further, the Program Charges recover Administration and General O&M costs allocated to the eligible customer classes to account for indirect costs of the pilot including labor, billing, customer accounting, customer assistance, and information technology costs.

Table A: Program Charges

Project Type \$/Month	Stand Alone Back-Up Generator	Other Resiliency Projects
Program Administration	\$70	\$300
Allocated A&G O&M	\$10	\$150
Total	\$80	\$450

- b. Resiliency Charges – Each customer participating in the pilot will pay a fixed monthly Resiliency Charge for each Resiliency Service Asset for the term specified in the CSA. The Resiliency Charge for each will recover the capital cost, less any CIAC plus routine O&M expense for the Resiliency Service Asset as specified in the CSA. The capital cost for each Resiliency Service Asset will be the result of the RFP process discussed in Attachment B with the customer paying for the assets used at their specific resiliency project. If a customer has more than one Resiliency Service Asset, this Charge will be presented to the customer on bill as a single line item encompassing all relevant Resiliency Service Assets included in the CSA.

The capital portion of the Resiliency Charge for a given Resiliency Service Asset is determined by subtracting any CIAC from the total capital cost of the asset and

⁹ Customers served on the Ds-1 Military Facilities Distribution Service tariff are not eligible for Optional Customer Distribution Service, as the Ds-1 tariff already provides for a similar arrangement.

multiplying the remaining amount by the specific carrying charge for that asset as reflected in the RS-1 tariff. Carrying charges reflect the Levelized Annual Revenue Requirement (“LARR”) for a specific asset type. The LARR varies by asset depending on the applicable book life, tax treatment, and net salvage rate and reflects a levelized treatment of the asset’s revenue requirement over its book life. The book life of the asset used in the Resiliency Charge will be set to match the term of the asset as reflected in the CSA. As previously discussed, all Resiliency Service Assets will have a CSA term of 10 years. As such all assets will have a book life of 10 years which will be used in the determination of Resiliency Charges.

The Investment Credits (“ITC”) may also impact the LARR if Resiliency Service Assets qualify for the ITC. In the pilot, some BESS, Generation Assets, and Switching and Control Equipment may qualify for an ITC and the carrying charges for those assets reflect a range of potential ITC treatments depending on the project’s construction year and operational characteristics of the assets. The CSA will reflect the final carrying charge.

The routine O&M portion of the Resiliency Charge for a given Resiliency Service Asset is determined for each customer projects separately and will reflect any applicable fixed O&M agreements with vendors for Resiliency Service Assets. Routine O&M cost and coverage will be identified for each individual project within the CSA. The customer will be invoiced separately for all Non-Routine O&M of Company-owned Resiliency Service Assets not considered routine maintenance as required by the CSA.

- c. CIAC Contributions – Customers will contribute 10 percent of the total project cost when the D&E Agreement is signed which will be considered a CIAC for projects that proceed to construction. Customers must pay a minimum CIAC of 10 percent of the total cost of each Resiliency Service Asset up front and may contribute up to 100 percent of the total cost of each Resiliency Service Asset. Customers paying a CIAC equal to the full cost of a Resiliency Service Asset will only pay the O&M portion of the monthly Resiliency Charge for that asset. The Company may also require the credit of a customer to be established satisfactorily to the Company according to the factors outlined within Section 2.33 of the Wisconsin Electric Rate Book or through the use of third-party credit support included in the O&M portion of the customer’s Resiliency Charge.
 - d. Asset Failure or Replacement – In the event a Resiliency Service Asset fails before the end of the CSA term, and the cost is not under warranty or insured, the customer will be responsible for any undepreciated value of the failed Resiliency Service Asset and the full cost of replacement if the customer elects to have the Asset replaced.
6. Tariff Terms and Conditions

The RS-1 tariff sets forth a number of standard terms and conditions necessary for participation in the pilot. These terms and conditions are designed to clarify areas of responsibility for the Company and the customer and to minimize certain risks associated with Company ownership and operation of Resiliency Service Assets.

Permitting and Compliance Reporting – The Company will manage all permitting and compliance associated with Company-owned Resiliency Service Assets. Costs associated with permitting and compliance for Resiliency Service Assets will be paid for by customers through the Resiliency Charges set forth in this tariff unless otherwise specified in the CSA.

Easements – If, in the Company's sole judgement, the Company needs an easement over the customer's property in order to furnish resiliency services to the customer, the customer shall provide the Company with an easement at no expense to the Company. If, in the Company's sole judgement, the Company needs an easement or easements over property not owned by customer in order to furnish service to the customer, the customer shall obtain the easement(s) at no expense to the Company. At the option of the Company, periodic fees associated with easements, crossing permits, licenses, etc., may be equitably assessed and billed to the customer(s) who benefit from such easements, crossing permits, licenses, etc.

Customer Wiring – All wiring and equipment on the customer's side of the point of connection shall be furnished, installed, and maintained at the customer's expense in a manner approved by the public authorities having jurisdiction over the same and in accordance with the Company's requirements. Any inspection of the customer's wiring and equipment by the Company is for the purpose of avoiding unnecessary interruptions of service to its customers or damage to its property and for no other purpose, and shall not be construed to impose any liability on the Company, to the customer, or any other person by reason thereof, and the Company shall not be liability or responsible for any loss, injury, or damage which may result from the use of, or defects in, the customer's wiring or equipment. The Company may, however, at any time require the customer to make such changes in their equipment or use thereof, as may be necessary to eliminate any hazardous condition or any injurious effect which the operation of customer's equipment may have on the Company's employees, equipment, or service. The transformers, service connections, meters, and appurtenances used in furnishing electric service to the customer including the Resiliency Service Assets, have a definite capacity, and therefore no material increase in load or equipment shall be made without first making arrangements with the Company for additional electric supply.

All customer-owned assets and facilities interconnected to the Company's distribution assets and facilities shall be the responsibility of the customer and subject to engineering plan approval by the Company during the project D&E process.

Company Control – At the Company's sole discretion, in order to ensure safe and effective operation of Resiliency Service Assets, participation in this pilot shall be conditioned upon customer granting Company all rights necessary to control any generation asset or BESS owned by customer that is located behind the customer's single meter and connected in parallel with Resiliency Service Assets owned by Company behind the customer's single meter, and Company may require additional protective equipment to be installed at customer's expense in order to integrate customer-owned assets with Company-owned assets.

Resiliency Project Modification – After Resiliency Service Assets are installed at a customer’s premise, the customer may not modify or interconnect additional generation, storage, or make major changes to load, wiring, or equipment behind the customer’s meter without consulting the Company who may require the completion of addition design and engineering studies at the customer’s cost prior to approving any modifications. If the customer makes material changes to load, wiring, or equipment behind the customer’s meter without consulting in writing with the Company this would be considered a breach of the CSA.

Renewable Energy Credits – All Renewable Energy Credits (“RECs”) associated with Resiliency Service Assets shall be assigned to the Company on behalf of the Customer, and the Company shall retire any RECs associated with a Resiliency Service Asset that are tracked in the Midwest Renewable Energy Tracking System program or any similar program on behalf of the customer.

C. Pilot Benefits – Participating Customers

Each customer will receive the benefits of the Resiliency Service Assets deployed for their resiliency project. Given the costs of Resiliency Service Assets are being borne entirely by the single participating customer, the Company believes that customer is due all benefits that derive from the use of those assets. Benefits will vary depending on the specific customer resiliency needs and resiliency project specifics. For Resiliency Service Assets consisting of BESS or Generation Assets and related switching and controls, the customer and Company shall include in the CSA an operational plan that is consistent with the terms of the tariff and best meets the customer’s objectives for the Resiliency Service Assets for the term of the CSA. To the extent practicable, the Company shall, via the CSA, provide or arrange to provide customer the benefits of any applicable warranties provided to the Company for the Resiliency Service Assets. The following discusses the benefits that may materialize for participating customers.

1. Back-Up or Alternative Power Service – Resiliency Service Assets will enable customers to disconnect from the Company’s grid and meet their own power needs during emergency times. The length and power requirements during such events will determine the Resiliency Service Assets needed and the Company will assist the customer in deciding how to best design and operate the assets during the D&E process.
2. Peak Demand Reductions – BESS Resiliency Service Assets may be utilized to lower demand charges on customer bills through low-cost off-peak charging and discharging during customer peak consumption times during normal grid operations. The BESS will need to maintain adequate charge to meet customer resiliency needs and conducting peak demand reduction may limit the use of the BESS to provide other benefits discussed in this section. Depending on project specifics and customer load profile, Solar PV Assets may also be able to support peak demand reductions. The Company will assist customers in deciding how to best dispatch and operate assets during the D&E process in order to leverage assets to best meet customer resiliency needs and achieve the greatest benefits.
3. Energy Arbitrage – BESS Resiliency Service Assets may be utilized to lower energy charges on customer bills through low-cost off-peak charging and high-cost on-peak discharging during normal grid operations. But similar to the discussion about peak demand reductions, the BESS will need to maintain adequate charge to meet customer resiliency needs and

conducting energy arbitrage may limit the use of the BESS to provide other benefits discussed in this section. The Company will assist customers in deciding how to best dispatch and operate assets during the D&E process in order to leverage assets to best meet customer resiliency needs and achieve the greatest benefits.

4. Reduced Energy Purchases – Under the terms of the RS-1 pilot, Resiliency Service Assets are eligible for any of the Company’s parallel generation tariffs, and customers taking service under this tariff with a Generation Asset or BESS interconnected with the Company’s system on the customer side of the single meter must participate in a parallel generation tariff. PV Solar Resiliency Service Assets, and potentially other types of low- or no-fuel-cost Generation Assets, can provide reductions to energy charges on customer bills pursuant to the terms of the Company’s parallel generation tariffs. The Company will only provide PV Solar through this pilot when paired with a BESS as the Company believes that PV Solar provides the greatest resilience benefit when paired with a BESS. This pairing allows the BESS to be charged by excess PV Solar generation providing a renewable form of back-up power as an alternative to a fossil fuel BUG. Further, pairing PV Solar with a BESS may enable customers to deploy a larger PV Solar system than the customer would otherwise be likely to install as a standalone PV system.
5. Frequency or Voltage Regulation – The Company will also consider how BESS and other technology may be used improve the quality of power as a resiliency service. This benefit may be quantifiable on customer bills if the customer’s power factor is improved, and it may induce off-bill cost savings if a BESS proves to be the least cost alternative to other power quality alternatives, when power quality is one benefit in a stack of benefits provided by the BESS. The full extent of uses for BESS to improve power quality is not currently known and this pilot will allow the Company to explore the use of BESS to meet customer power quality needs. Use cases for BESS to improve power quality will be case specific and may only be present under certain circumstances.
6. Peak Control Rate Eligibility – Back-Up Generators or BESS Resiliency Service Assets at customer premises may enable customers to participate in the Company’s Peak Control Rate (CP-1 or CP-3). The Peak Control Rate typically results in 10 to 15 percent customer bill savings through reduced demand charges. Customers utilizing BESS assets to participate in the Peak Control Rate may forgo other bill savings previously discussed as they will need to keep the battery charged for use during peak control events. The Company will assist customers in deciding how to best dispatch and operate assets during the D&E process in order to leverage assets to best meet customer resiliency needs and achieve the greatest benefits.

Some benefits discussed above will not be quantifiable in terms of bill savings, such as Back-Up or Alternative Power Service, Frequency or Voltage Regulation, or Experience with Potential Non-Wires Alternatives; however, the other benefits may produce bill reductions. After the implementation of the Resiliency Service Assets, any bill savings will be included in the customer’s bill in the form of demand reductions, energy reductions, or credits from their participation in the peak control rate. Since these benefits are embedded in the charges on the participating customer’s bill, the customer will not be able to directly observe the savings caused by the Resiliency Service Assets. The Company plans to provide customers with periodic reporting demonstrating the estimated bill savings associated with the Resiliency Service Assets.

Through this reporting, the Company will help the customer understand the difference in what their bills would have been had the customer continued their business as usual versus the bill reductions associated with the Resiliency Service Assets. The Company is not planning on providing this reporting to customers monthly or embedded within customer bills at this time due to limitations within the Company's billing system. This reporting involves complex analysis that cannot be done within the Company's billing system without substantial investments. Because the reporting will be done manually, the Company is proposing to offer customers this reporting on an annual basis.

D. Other Pilot Benefits

In addition to the benefits that participating customers may accrue as a result of participation in the pilot, the Company has identified additional benefits of its Resiliency Service pilot.

1. Experience with Potential Non-Wires Alternatives – Company ownership and operation of Resiliency Service Assets will provide valuable experience to the Company on the benefits of behind-the-meter technologies that can aid the Company in evaluation of alternatives to traditional utility distribution investments. As proposed, the pilot is voluntary for customers and exists to meet customer resiliency needs. The Company is not proposing this pilot as an alternative to traditional distribution investments or planning, and the pilot will not be used to actively pursue non-wire alternatives; however, the data and experience from the pilot may be valuable for evaluating non-wire alternatives in the future.
2. Community Critical Infrastructure Support – The pilot will result in the additional deployment of microgrids and green energy infrastructure which could help achieve carbon emissions goals for individual customers, communities, and the state of Wisconsin. Community microgrid projects supported by the pilot will enable communities to provide support to the most vulnerable groups during a disaster.

E. Customer Outreach and Interest

The Company will primarily rely on support from its Community Service Managers and Account Managers along with program staff to communicate with customers about opportunities to participate in the pilot. The Company believes it will be important to have specific conversations with individual customers about how the pilot may help meet the customer's specific resiliency needs. This individualized approach has functioned well to date as the Company has had preliminary discussions about resiliency projects with a number of customers to gauge customer interest prior to filing this pilot and to solicit feedback from customers when designing this pilot. The Company may also reach out to customers through channels that customers expect to use when receiving or seeking information regarding any of the products and services offered by the Company such as email, social media, and traditional media.

The Company has several customers already interested in the pilot shown in Table B below some of which have provided letters of support contained within Attachment D. These customers include community shelters, hospitals, emergency services, wastewater or water treatment facilities, and military facilities. A summary of this initial list of customers and their potential projects is included below. This is only a preliminary list based on limited outreach conducted prior to this filing; there are likely additional potential projects that will be identified

based on further outreach the Company plans to conduct upon receiving approval for this pilot. Cost estimates here are preliminary and are likely to change if these projects are pursued further.

Table B: Interested Customer Potential Projects

Project Site Description	New Resiliency Assets	Existing Customer Assets	Rough Cost Estimate
Community Center/ Emergency Shelter	Solar, BESS, BUG, Microgrid	None, new build	\$1-2 million
Military Critical Facility	Solar, BESS, Microgrid	BUG	\$4-5 million
Water Treatment Plant	Solar, BESS, Microgrid	BUG	\$1 million
Wastewater Treatment Plant and Government Buildings	Solar, BESS, Microgrid	Biogas generator	\$1-3 million
Local Government Building	BESS, Microgrid	Solar	\$1 million
Healthcare Clinic	BESS, Microgrid	Solar, Landfill gas generator	\$1 million
Local Government/ Emergency Services	Microgrid, other TBD	Solar, BUG	\$1 million

F. Estimated Pilot Budget

Table C below outlines a rough estimate of pilot projects, capital expenditures, and revenue requirements. The estimated revenue requirements reflect the total impact of the estimated projects including capital and assumed routine O&M which will be recovered from dedicated customer charges billed to program participants. The estimated projects below do not specifically reflect the customer projects shown in Table B, as Table B only incorporates potential projects discussed with a small number of customers with whom the Company has specifically discussed this pilot to date. The timing and participation of any specific resiliency project in this pilot is at the discretion of the customer, with the scope and timing of projects highly dependent upon a number of factors outside of the control of the Company. Due to this uncertainty and the unpredictable nature of these projects, the Company does not plan to include estimates of future costs associated with these projects in its capital and O&M forecasts until any specific project has a signed CSA.

Table C: Estimated Pilot Budget

Year	2021	2022	2023	2024	2025	2026
Estimated Annual Projects:						
Stand Alone Back-Up Generator	1	2	2	2	2	4
Other Resiliency Projects	1	1	2	1	2	2
Total Projects	2	3	4	3	4	6
Estimated Annual Capital (\$M)	\$1.7	\$2.2	\$3.4	\$2.2	\$3.4	\$4.4
Estimated Annual Rev. Req. (\$M)	\$0.2	\$0.8	\$1.5	\$2.2	\$2.9	\$3.8

G. Accounting and Regulatory Treatment

Resiliency Service Asset revenues and costs will be accounted for consistent with current practices. Customers will pay for their requested Resiliency Service Assets through a unique on-bill charge that recovers the revenue requirement of the assets requested by each customer enabling pilot revenues to recover all pilot costs. As Resiliency Service Assets are placed in service the Company receives incremental revenues from the customer based on the revenue requirement of the assets. Consequently, the pilot does not rely on subsidization from non-participation. This treatment was recently approved by the Commission related to the Company's Electric Vehicle pilots in 4220-TE-104.

When Resiliency Service Assets are placed in service their capital cost will be added to rate base in FERC Account 371 which will be offset in rate base by any CIAC payments from the customer. The purchase and installation of the assets will be capitalized as electric distribution assets to Plant in Service as individual assets. The Company will request that in future rate case filings the capitalized cost be allowed in rate base and receive a return on investment. O&M expense related to the pilot will also be included in the Company's revenue requirement during its next rate case filing and will be accounted for in the appropriate FERC accounts depending on the Resiliency Service Asset and cost type.

Program and Resiliency Charge revenues will also be included in revenue at present rates in future rate case filings and are designed to recover all pilot costs from participating customers. The Program Charge is designed to recover program administration along with an allocation of A&G O&M. The Resiliency Charge is designed to recover the revenue requirement for a specific installed Resiliency Service Asset along with the routine O&M costs related to that asset. Non-routine O&M costs and replacement capital costs will be directly invoiced to the customer or result in additional CSA between the Company and customer. All Program Charge and Resiliency Charge revenue collected from participating customers taking service from the RS-1 Tariff will be included in the Company's rate case filings as retail revenue at present rates. Including the revenues in the Company's revenue requirement ensures that the revenue requirement related to the previously discussed capital and O&M costs are recovered from participating customers as opposed to non-participating customers. Since the pilot is designed to be cost-based, with pilot revenues covering the pilot costs, the Company is not requesting a deferral in this Application for revenue requirement impacts of the pilot.

The Company notes that resiliency projects will be highly customized, and the revenues and costs associated with the pilot will be extremely difficult to forecast accurately. Additionally, the timelines for each project will depend heavily on individual customer decisions and planning processes outside the control of the Company. Because of the difficulty in accurately forecasting the projects associated with this pilot, and because the dollars associated with these projects are likely to be materially significant, the Company believes it is appropriate to not include forecast project revenues and costs in future test years during the rate case process. Consequently, only revenues and costs for projects with signed CSA from customers will be included in future rate cases. Since actual revenues offset the levelized actual costs, non-participating customers will not be impacted. Likewise, since no forecast revenues or costs will be included in the case, non-participating customers will not be impacted if a forecast project does not materialize. As forecast projects go in service between rate cases, the incremental revenue will offset individual

project costs in real time without the need for recovery through a rate case. The Company will fully address issues of cost recovery and allocation in future rate case filings.

H. Pilot Outcomes

The Resiliency Service Pilot is designed to evaluate several objectives and provide actionable outcomes for more informed decisions in the future.

Design – The pilot seeks to evaluate customer response and the effectiveness of the design of the pilot. The pilot supports customer resiliency projects and new technologies through a utility ownership and operation model and also supports non-standard distribution configurations. Key questions to be address include:

1. Does the proposed utility ownership and operation model enable or increase adoption of resiliency projects and new technologies? If so, what are the factors that influence customers to choose utility ownership and operation of resiliency assets?
2. Does addressing upfront costs to customer resiliency projects and new technologies affect customer adoption of these technologies?
3. Do distribution modifications to serve multiple premises behind a single meter provide value to customers and encourage wider-scale deployment of storage technologies?
4. What additional barriers exist to meeting customer resiliency needs?

Customer Benefits – The pilot also seeks to evaluate and demonstrate the customer benefits associated with resiliency projects. As discussed above, these benefits may include:

1. Back-Up or Alternative Power Service
2. Peak Demand Reduction
3. Energy Arbitrage
4. Reduced Energy Purchases
5. Frequency or Voltage Regulation
6. Peak Control Rate Eligibility

Other Benefits – Additionally, as discussed above, the pilot will also provide the Company with experience with potential non-wires alternatives and can enable communities to increase resiliency for critical infrastructure, thereby increasing support for vulnerable populations.

The Pilot Outcomes will be assessed in a Pilot Review Report shared with the Commission as discussed in the Pilot Reporting Requirements section that follows.

I. Pilot Reporting Requirements

Annual Report – The Company will prepare and file an annual report that will provide the number of new customers participating in the pilot from the prior year. The report will include each new customer's Resiliency Service Assets, cost of each asset, and customer CIAC and Allowance.

Pilot Review Report – The Company will prepare a detailed review of the pilot by December 31, 2025 (approximately four years after approval of the pilot). The detailed review will include:

- Analysis of revenues to the Company from pilot charges related to the revenue requirement of the Company's investments and operation and maintenance of the Resiliency Service Assets
- Analysis of customer benefits, including energy, demand, and bill reductions, experienced by participating customers resulting from Resiliency Service Assets
- Evaluation of the pilot design including whether the design supports the adoption of new technology through decreased upfront cost and the benefits of non-standard distribution configurations
- Evaluation of the 30 MW pilot cap on BESS and Generation Assets
- Proposal to continue, modify, expand, replace, or close the pilot

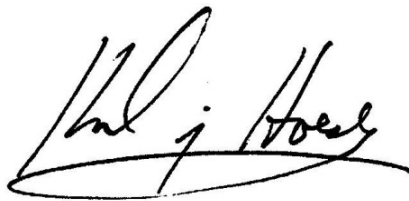
J. Conclusion

The Company looks forward to the Commission's review of its proposal. Because customer participation in the Resiliency Service Pilot is voluntary, and this Application does not request an increase in rates or a reduction in service for non-participating customers, the Company does not believe a contested case proceeding or hearing is required.

The Company respectfully requests that the Commission issue an Order approving the pilot by May 1, 2021 so that the pilot can be made available to customers beginning in 2021.

Respectfully submitted this 9th day of December 2020.

NORTHERN STATES POWER COMPANY
a Wisconsin corporation, and wholly owned subsidiary of
Xcel Energy Inc.

A handwritten signature in black ink, appearing to read 'Karl J. Hoesly', with a large, sweeping underline.

By: Karl J. Hoesly
Regional Vice President, Rates and Regulatory Affairs

RESILIENCY SERVICE PILOT

Availability: The Program is available to Customers served under Rate schedules Cg-7, Cp-3, Cg-9, and Cp-1, RTP-1, and Mp-1 who take service from a single metering point.

This Program is an experimental pilot program. This experimental Program has a maximum subscription limit of 30 MW Alternating Current (AC) of combined nameplate capacity of Battery Energy Storage Systems and Generation Assets, with 10 MW reserved for government or non-profit Customers until December 31, 2025. Beginning January 1, 2026, all available capacity for the Program is available to any qualifying Customer.

Purpose: This Program is for the purpose of providing resiliency services to Customers. At the Company's discretion, and except as otherwise provided in this tariff, these services may include any combination of the following Resiliency Service Assets:

Battery Energy Storage System: The Company will install, operate, and maintain on-site Battery Energy Storage Systems to allow Customers to operate independently from the electric grid in the event of an emergency resulting in grid outage. Unless otherwise specified in the Customer Service Agreement, the Battery Energy Storage Systems must have dedicated metering for informational purposes and to quantify the Customer benefits during normal grid operations as determined in the Customer Service Agreement and the Company's applicable Parallel Generation tariff. The Company may also install, operate, and maintain additional equipment to accomplish automatic switching and control of Company or Customer owned Battery Energy Storage Systems interconnected to Customer systems or the Company's distribution system. Customers shall pay a monthly amount for the Battery Energy Storage Systems and additional metering, switching, and control facilities in accordance with this tariff.

Generation Assets: The Company will install, operate, and maintain on-site Generation Assets, including but not limited to Solar Photovoltaic and Back-Up Generation Assets, to power a Battery Energy Storage System or otherwise to allow Customers to operate independently from the electric grid in the event of an emergency resulting in grid outage. Unless otherwise specified in the Customer Service Agreement, the Generation Assets must have dedicated metering for informational purposes and to quantify the Customer benefits during normal grid operations as determined in the Customer Service Agreement and the Company's applicable Parallel Generation tariff. The Company may also install, operate, and maintain additional equipment to accomplish automatic switching and control of Company or Customer owned Generation Assets interconnected to Customer systems or the Company's distribution system. Customers shall pay a monthly amount for the Generation Asset and additional metering, switching and control facilities in accordance with this tariff.

Non-dispatchable Generation Assets will not be installed, operated, or maintained by the Company under this tariff unless Customers also receive a Battery Energy Storage System Resiliency Service Asset from this tariff or have an existing Customer-owned behind the meter Battery Energy Storage System interconnected in parallel to the Company's system.

ISSUED:

EFFECTIVE:

PSCW AUTHORIZATION:

RESILIENCY SERVICE PILOT (continued)

Project Development Process: Prospective projects under this tariff shall be categorized by the Company as either Stand Alone Back-Up Generator or Other Resiliency Projects. The Stand Alone Back-Up Generator Program Charge will be for Customer resiliency projects that only contain Back-Up Generation Assets and related switching and control equipment. The Other Resiliency Projects Program Charge will be for customer resiliency projects that contain any other combination Generation Assets, including Back-Up Generation Assets, and Battery Energy Storage Systems. Customers that wish to take service under this tariff shall be required to complete both a Preliminary Scoping phase and a Design & Engineering phase prior to entering into a Customer Service Agreement. Customers shall pay a fee of \$500 to complete the Preliminary Scoping phase of Other Resiliency Projects.

Customer Service Agreement: Customers must sign a Customer Service Agreement prior to taking service from this tariff. The Customer Service Agreement identifies the Resiliency Service Assets to be provided, describes the agreed operation and maintenance of Resiliency Service Assets being provided to Customers, and associated Rate, Program Charges, and Resiliency Charges as described below, and also provides Program Terms and Conditions. Company and Customer shall enter into a Customer Service Agreement only upon mutual agreement of both parties.

Customers elect to fund the Resiliency Service Assets according to this tariff. All Resiliency Service Assets are extraordinary or unusual, and extensive repairing or rebuilding of Company facilities may be necessary to accommodate Customers making application for service, therefore the Company reserves the right to require Customers to execute a contract with the Company for a definite character or period of service, and to otherwise protect the Company against possible losses in a manner consistent with Section 5.98 of the Wisconsin Electric Rate Book.

Performance of Resiliency Assets: For Resiliency Service Assets consisting of Battery Energy Storage Assets or Generation Assets and related Switching and Control Equipment, the Customer and Company shall include in the Customer Service Agreement an operational plan that is consistent with the terms of this tariff and best meets the Customer's objectives for the Resiliency Service Assets for the term of the Customer Service Agreement. To the extent practicable, the Company shall, via the Customer Service Agreement, provide or arrange to provide the benefits of any applicable warranties provided to the Company for the Resiliency Service Assets to the Customer.

Rate: Customers will be charged according to the applicable Cg-7, Cp-3, Cg-9 or Cp-1, RTP-1, or Mp-1 tariff rates for their metered usage.

Minimum Customer Contribution in Aid of Construction: Customers must pay a minimum CIAC of 10 percent of the total cost of each Resiliency Service Asset and may contribute up to 100 percent of the total cost of each Resiliency Service Asset. The Company may also require the credit of a Customer to be established satisfactorily to the Company according to the factors outlined within Section 2.33 of the Wisconsin Electric Rate Book or through the use of Third-Party Credit support included in the O&M portion of the Resiliency Charges described below.

ISSUED:

EFFECTIVE:

PSCW AUTHORIZATION:

RESILIENCY SERVICE PILOT (continued)

Program Charges: Customers will pay one of the following Program Charges for the term specified in the Customer Service Agreement.

Stand Alone Back-Up Generator per Month \$80

Other Resiliency Projects per Month \$450

Resiliency Charges per Month: Customers will be charged a fixed monthly Resiliency Charge for each Company-owned Resiliency Service Asset for the term specified in the Customer Service Agreement. Costs related to interconnection of a Resiliency Service Assets are not included in the Capital cost of the Resiliency Service Asset.

$$\text{Resiliency Charge} = (C - \text{CIAC}) \times I / 12 + \text{O\&M}$$

C = Capital Cost of Company-owned Resiliency Service Asset

CIAC = Customer Contribution in Aid of Construction in accordance with this tariff

I = Annual average carrying charges for the applicable Company-owned Resiliency Service Asset

O&M = Monthly routine operation and maintenance as defined in the Customer Service Agreement

Annual Average Carrying Charges: Annual average carrying charges for each Company-owned Resiliency Service Asset are derived from the Company's most recently approved Wisconsin Depreciation Filing. Carrying Charges by asset type for 10-year Customer Service Agreements are listed as follows:

FERC	Description	Carrying Charge*
371	Battery Energy Storage System	12.1% - 15.8%
371	Generation Assets	11.9% - 17.3%
371	Switching and Control Equipment	11.9% - 17.3%

* The Annual Average Carrying Charge will reflect the actual qualifying tax treatments and will be described in the executed Customer Service Agreement to reflect qualifying investment or production tax credits.

Non-Routine O&M: The Customer will be invoiced separately for all O&M of Company-owned Resiliency Service Assets not considered routine. Non-routine O&M shall consist of any maintenance not defined as Routine O&M in the Customer Service Agreement and shall include all asset decommissioning costs.

ISSUED:

EFFECTIVE:

PSCW AUTHORIZATION:

RESILIENCY SERVICE PILOT (continued)

Asset Failure or Replacement: In the event a Resiliency Service Asset fails before the end of the Customer Service Agreement term, and the cost is not under warranty or insured, the Customer will be responsible for any undepreciated value of the failed Resiliency Service Asset. Customer shall also be responsible for the full cost of replacement if the Customer elects to have the failed Asset replaced.

Transfer of Asset Ownership: After the term or termination of a Customer Service Agreement, ownership of Resiliency Service Assets will be transferred to the Customer or retained by the Company as specified below. After the term or termination of a Customer Service Agreement and pursuant to the terms of the Customer Service Agreement, Company shall transfer ownership to Customer of Resiliency Service Assets according to the terms of this tariff. The Customer is required to pay the Company for any undepreciated value of the Resiliency Service Assets due to termination of the Customer Service Agreement prior to the end of its term.

Once the Customer has paid for any undepreciated value, the Company will transfer ownership of Resiliency Service Assets to the Customer. If the Customer wishes to have the Company remove, retire and/or decommission any Resiliency Service Asset at the end of the Customer Service Agreement term, the Customer will also be responsible for all costs of removal net of salvage, retirement, and decommissioning.

Additional Customer Service Agreements: If Customer wishes to continue Company ownership of a Resiliency Service Asset after conclusion of the term or termination of a Customer Service Agreement, a new Customer Service Agreement must be signed by the Customer in accordance with this tariff. Upon the term or termination of a Customer Service Agreement, Customer may sign a new Customer Service Agreement for the Company to perform operation and maintenance of Resiliency Service Assets. Customer may also sign a new Customer Service Agreement for the replacement of, or installation of additional, Resiliency Service Assets.

Multiple Premise Provision: Consistent with this paragraph, multiple premises of the same Customer account from any of the following may be combined in order to satisfy the Availability criteria to participate in the Program as a single Customer: Cg-1, Cg-2, Cg-7, Cp-3, Cg-9, Cp-1, RTP-1, or Mp-1. The multiple premises together must qualify for the rate schedules eligible for this tariff as described in the Availability section and must be served through a single meter. In cases where multiple premises participate in this program, the Customer will be billed as a single Customer from the required single meter according to the Cg-7, Cp-3, Cg-9, Cp-1, RTP-1, or Mp-1 tariff, except as described below for Optional Customer Distribution Service. If the Company owns distribution assets on the Customer's side of the single meter that are not Resiliency Service Assets, the Customer will be enrolled in Optional Customer Distribution Service.

ISSUED:

EFFECTIVE:

PSCW AUTHORIZATION:

RESILIENCY SERVICE PILOT (continued)

Optional Customer Distribution Service: A Customer eligible for this Program may request Optional Customer Distribution Service as set forth in this paragraph. The Company will install, operate, and maintain distribution assets on the Customer side of Primary or Secondary metering equipment. Customer Contributions in Aid of Construction towards these assets will be governed by Section 5 - Extension Rules of the Company's Rules and Regulations (Ex-1). Any remaining cost after the applicable Allowance is applied for providing Customer Distribution Service must be paid by the Customer upfront as a Contribution in Aid of Construction. Additionally, Customers will be billed as a Secondary voltage Cg-7, Cp-3, Cg-9, Cp-1, RTP-1, or Mp-1 Customer at the metering point regardless of the actual voltage of the single meter. Customers may receive Optional Customer Distribution Service without Company ownership of any other Resiliency Service Assets. Customers served on the Ds-1 Military Facility Distribution Service tariff are not eligible for Optional Customer Distribution Service. Nothing in this tariff shall require the Company to purchase existing distribution assets from Customer or another party.

Distribution Modifications: Customers are responsible for the cost of distribution and service modifications to take service from a single meter as an upfront Customer Contribution in Aid of Construction. When applicable, new or upgrading Customers will receive an Allowance according to Section 5 - Extension Rules of the Company's Rules and Regulations (Ex-1) based on the estimated load at the single metering point based on the rate at which the single metering point is billed regardless of the actual voltage of the single meter.

Existing premise metering points may remain in place or new premise metering points may be added at the Customer's request to provide premise-level consumption information to the Customer. Each non-revenue meter point will be assessed a monthly Meter Charge of \$5.00.

Parallel Generation Provision: Customers taking service under this tariff with Company or Customer-owned Generation Assets or Battery Energy Storage Systems interconnected with the Company's system on the Customer side of the single meter must participate in a parallel generation tariff. Solely for purposes of the availability criteria for the Company's parallel generation tariffs, Resiliency Service Assets shall be deemed to be Customer-owned. When a Customer resiliency project involves the service of multiple premises through a single meter, as described in the Multiple Premise Provision, the single metering point will be the point of metering for the purposes of the applicable parallel generation tariff.

All Generation Assets and Battery Energy Storage Systems will require dedicated metering points. Each non-revenue meter point will be assessed a monthly Meter Charge of \$5.00.

ISSUED:

EFFECTIVE:

PSCW AUTHORIZATION:

RESILIENCY SERVICE PILOT (continued)

Terms and Conditions of Service:

1. Prior to entering into a Customer Service Agreement under this Tariff, Company may require Customer to enter into a Design and Engineering Agreement with the Company. Customer shall be required to pay no more than 10 percent of the estimated cost of the planned Resiliency Service Assets as a condition of entering into the Design and Engineering Agreement. The Design and Engineering payment will be considered a CIAC if the Resiliency Service Assets are constructed. If the Resiliency Service Assets are not constructed, the Customer is responsible for actual Design and Engineering costs that exceed the initial payment and will be refunded if actual Design and Engineering costs do not exceed the initial payment. Any and all work relating to a Design and Engineering Agreement will at all times remain the proprietary property of the Company.
2. Customer is required to pay for interconnection-related costs incurred under Wis. Admin. Code ch. PSC 119 for an interconnection application submitted by Company for Resiliency Service Assets.
3. The Company will manage all permitting and compliance associated with Company-owned Resiliency Service Assets. Costs associated with permitting and compliance for Resiliency Service Assets will be paid for by Customer through the Resiliency Charges set forth in this tariff unless otherwise specified in the Customer Service Agreement.
4. If, in the Company's sole judgement, the Company needs an easement over the Customer's property in order to furnish resiliency services to the Customer, the Customer shall provide the Company with an easement at no expense to the Company. If, in the Company's sole judgement, the Company needs an easement or easements over property not owned by Customer in order to furnish service to the Customer, the Customer shall obtain the easement(s) at no expense to the Company. At the option of the Company, periodic fees associated with easements, crossing permits, licenses, etc., may be equitably assessed and billed to the Customer(s) who benefit from such easements, crossing permits, licenses, etc.
5. The Company and Customer shall only enter into a Customer Service Agreement to install, operate and maintain Resiliency Service Assets upon mutual agreement of the parties. Neither Customer nor Company may compel the other to enter into a Customer Service Agreement under this tariff, and the Company shall have sole discretion to decline to provide any requested Resiliency Service Assets to any Customers under this tariff. All terms and conditions apply as stated in the Customer Service Agreement between the Company and the Customer.

ISSUED:

EFFECTIVE:

PSCW AUTHORIZATION:

RESILIENCY SERVICE PILOT (continued)

Terms and Conditions of Service (Continued):

6. All wiring and equipment on the Customer's side of the point of connection shall be furnished, installed, and maintained at the Customer's expense in a manner approved by the public authorities having jurisdiction over the same and in accordance with the Company's requirements. Any inspection of the Customer's wiring and equipment by the Company is for the purpose of avoiding unnecessary interruptions of service to its Customers or damage to its property and for no other purpose, and shall not be construed to impose any liability on the Company, to the Customer, or any other person by reason thereof, and the Company shall not be liability or responsible for any loss, injury, or damage which may result from the use of, or defects in, the Customer's wiring or equipment. The Company may, however, at any time require the Customer to make such changes in their equipment or use thereof, as may be necessary to eliminate any hazardous condition or any injurious effect which the operation of Customer's equipment may have on the Company's employees, equipment, or service. The transformers, service connections, meters, and appurtenances used in furnishing electric service to the Customer including the Resiliency Service Assets, have a definite capacity, and therefore no material increase in load or equipment shall be made without first making arrangements with the Company for additional electric supply.
7. At the Company's sole discretion, in order to ensure safe and effective operation of Resiliency Service Assets, participation in this Program shall be conditioned upon Customer granting Company all rights necessary to control any generation asset or battery energy storage system owned by Customer that is located behind the Customer's single meter and connected in parallel with Resiliency Service Assets owned by Company behind the Customer's single meter, and Company may require additional protective equipment to be installed at Customer's expense in order to integrate Customer-owned assets with Company-owned assets.
8. All Resiliency Service Assets must adhere to the Company's existing rules and regulations, tariffs, and policies, unless otherwise required by this tariff, and must meet the Company's safety, power quality, and other electrical standards as determined by the Company.
9. All Customer-owned assets and facilities interconnected to the Company's distribution assets and facilities shall be the responsibility of the Customer and subject to engineering plan approval by the Company during the project Design and Engineering phase.
10. After Resiliency Service Assets are installed at a Customer's premise, the Customer may not modify or interconnect additional generation, storage, or make major changes to load, wiring or equipment behind the Customer's meter without consulting in writing with the Company, who may require the completion of addition design and engineering studies at the Customer's cost prior to approving any modifications.

ISSUED:

EFFECTIVE:

PSCW AUTHORIZATION:

RESILIENCY SERVICE PILOT (continued)

Terms and Conditions of Service (Continued):

11. All Renewable Energy Credits (RECs) associated with Resiliency Service Assets shall be assigned to the Company on behalf of the Customer, and the Company shall retire any RECs associated with a Resiliency Service Asset that are tracked in the Midwest Renewable Energy Tracking System program or any similar program on behalf of the Customer.
12. All rates are subject to periodic re-pricing as approved by the Public Service Commission of Wisconsin.
13. The Company reserves the right to terminate this program in its sole discretion upon a requisite filing to the Public Service Commission of Wisconsin.

ISSUED:

EFFECTIVE:

PSCW AUTHORIZATION:

Detailed Pilot Project Management Process

Each resiliency project will be customized to meet the needs of the individual customer and will consider site-specific design considerations. There are two categories of customer projects under which the Company will provide Resiliency Service Assets within the pilot: Stand Alone Back-Up Generator, and Other Resiliency Projects. The Stand Alone Back-Up Generator category will be for customer resiliency projects that only contain a BUG and related switching and control equipment. The Other Resiliency Projects category will be for customer resiliency projects that contain any other combination of BUG, other Generation Assets, and BESS. Customer resiliency projects will follow the project management process outlined in Figures 1 and 2 and as described below.

Figure 1: Customer Project Planning

Step 1	Step 2	Step 3	Step 4	Step 5
Customer Contact	Exploratory Meeting	Preliminary Scoping	Project Request for Proposal (“RFP”)	Design and Engineering (“D&E”)
<ul style="list-style-type: none"> • Engagement through account management or customer inquiry 	<ul style="list-style-type: none"> • Meeting between customer, program manager, and account management 	<ul style="list-style-type: none"> • Preliminary project design phase and interconnection screening • Work with customer to define scope for RFP 	<ul style="list-style-type: none"> • RFP released to qualified vendors • Company and customer work together to award bid for Design and Engineering 	<ul style="list-style-type: none"> • Customer signs Design and Engineering agreement for detailed design work and interconnection process begins

Customer Contact – Through an initial conversation initiated by either the customer or a representative from Xcel Energy, primarily through Account or Community Service Managers, the Company will identify a customer’s interest in resiliency services or assets. The Company’s Resiliency program staff will meet with the customer for an exploratory meeting to determine whether the customer will qualify for and is interested in the pilot.

Preliminary Project Scoping – If the customer expresses interest in the pilot after the exploratory meeting, the customer will provide the Company with information necessary for the Company to identify a preliminary scope for the project. Projects that are not Stand Alone Back-Up Generators will pay a fee of \$500 to complete the preliminary scoping phase.¹ The Company may also provide the customer with preliminary estimates and project designs that meet the customer’s resiliency needs. When applicable, this step will also include a preliminary interconnection screening. When customers wish to proceed beyond this preliminary scoping phase, they will work with the pilot program staff to refine the project scope in order to proceed to the RFP process.

¹ The \$500 fee will offset the anticipated administrative costs associated with the work to provide a preliminary scope for the project, including the cost associated with producing a pre-application report that provides initial information about the requested point of interconnection. The remainder of the estimated costs for this preliminary scoping phase are incorporated into the administrative budget for the pilot overall. See discussion later in this Application regarding Program Charges.

Project RFP – The Company will solicit vendor(s) to complete the customer’s resiliency project, or provide specific services or Resiliency Service Assets, in the form of an RFP.² The Company expects in most cases to issue the RFP directly to a pre-approved list of qualified vendors under a Master Service Agreement (“MSA”) with the Company. This process will ensure that customers receive resiliency services and assets from reputable providers in a timely manner without the need for the Company to undertake a more lengthy RFP process “from scratch” for each customer project. The Company plans to only solicit vendors to provide Resiliency Service Assets with demonstrated success in the market; this pilot is not intended to support Company ownership of experimental technology. The pre-approved list of vendors will be identified through a public Request for Qualifications (“RFQ”) process that will allow for participation from both regional and national vendors and will include the ability to add additional qualified vendors periodically. The Company plans to conduct this RFQ process concurrently with the Commission’s review of this Application, with the intent to identify qualified vendors and put MSAs in place by the time the Commission makes its decision regarding this Application.³

Customers will have the option to participate in and guide the RFP process from the pre-approved vendor list or may request the Company initiate an RFP process outside of the pre-approved vendor list to ensure the RFP meets their specifications and desired outcomes. In the event no pre-approved vendors can meet a customer’s resiliency needs, a separate RFP process will be conducted by the Company outside of the pre-approved vendor list for the customer’s specific project. Respondents to the RFP process will provide estimates for the cost to construct the project, including costs to complete the design & engineering necessary to construct the project. The Company and customer will work together to evaluate the results of the RFP process and award a bid for the Design and Engineering of the customer’s resiliency project.

D&E – Once the Company and customer have selected the vendor needed for the customer’s resiliency project, the customer will need to sign a D&E Agreement before more detailed D&E work can be done for the Resiliency Service Assets. The D&E Agreement between the customer and the Company includes a description of the D&E work to be completed by the selected vendor and payment terms which will reflect the Company’s obligations to the vendor. At the time of signing the D&E Agreement, a customer be required to pay 10 percent of the estimated project costs including D&E costs as identified by the vendor. Any and all work relating to a D&E Agreement will at all times remain the proprietary property of the Company. In the event a customer decides not to proceed with the project at any time after the D&E work has begun, the customer will be responsible for the actual D&E costs incurred to date.⁴ If the resiliency project proceeds to construction, the costs incurred for D&E will be included in the total capital cost of the project, with the payment associated with the D&E phase considered a Customer Contribution in Aid of Construction (“CIAC”).⁵ The D&E phase will aid the customer, Company, and vendor in

² A more streamlined process may be possible for Stand Alone Back-Up Generator projects that do not require detailed design and engineering work to scope the project.

³ The MSA will not bind the Company to use or pay the pre-approved vendors for any specific projects or any minimum number of projects.

⁴ If at any point the customer notifies the Company of its intent not to proceed further, D&E costs will be trued up to actuals. If actual costs incurred are less than the payment customer has already made, customer will be issued a refund. If actual costs incurred are greater than the payment customer has already made, customer will be responsible to pay for the balance of actual costs.

⁵ Costs and payments associated with the interconnection process and interconnection upgrades pursuant to Wis. Admin. Code ch. PSC 119 will not be included in the capital cost of the project.

identifying specific Resiliency Service Assets that will meet the customer's resiliency needs. Construction, operation, and maintenance costs will also be scoped in detail as part of this process.⁶ Pricing estimated in the D&E process may change if the scope of construction changes.

The D&E process will also explore interoperability and interconnection issues, including beginning the formal interconnection process. Resiliency projects will follow the normal distributed generation interconnection application procedures for any assets that will connect in parallel with the Company's distribution system, and the Company will submit an interconnection application for the project as needed. In addition to the cost of the D&E work as described above, the customer will be responsible for any applicable interconnection process costs, including interconnection application fees, engineering review fees and engineering study fees. A customer's resiliency project may include existing or new customer-owned on-site assets operating independently or in conjunction with Company-owned Resiliency Service Assets provided through the program. Customer-owned assets will remain customer-owned, and operation of customer-owned assets incorporated into a resiliency project under the program will be addressed in the Customer Service Agreement.

Figure 2: Customer Project Construction and Operation

Step 6	Step 7	Step 8	Step 9	Step 10
Customer Service Agreement ("CSA")	Interconnection and Permitting	Construction and Commissioning	Operation and Maintenance	End of Contract
<ul style="list-style-type: none"> • Customer accepts D&E plans and signs customer Service Agreement • Establish construction schedule 	<ul style="list-style-type: none"> • Interconnection study and agreement through standard process 	<ul style="list-style-type: none"> • Construction through selected contractor • Company distribution extension or modification work as necessary 	<ul style="list-style-type: none"> • Assets operated for customer benefits according to customer Service Agreement • Contractor provides O&M as necessary • Regular reporting provided to customer 	<ul style="list-style-type: none"> • Transfer ownership of Resiliency Service Assets to customer • Customer responsible for decommissioning and removal at end of operable life

CSA – Prior to the start of construction on a resiliency project, the customer must sign a CSA with the Company outlining the pricing, construction drawings and schedule, ownership and transfer conditions, and operation and maintenance terms. Customers elect to fund the Resiliency Service Assets according to the RS-1 tariff. All Resiliency Service Assets are extraordinary or unusual, and the Company therefore reserves the right to require customers to execute a contract with the Company for a definite character or period of service, and to otherwise protect the Company against possible losses in a manner consistent with Section 5.98 of NSPW's Wisconsin Electric Rate Book. The Company and customer shall only enter into a CSA to install, operate and maintain Resiliency Service Assets upon mutual agreement of the parties. Neither customer nor Company may compel the other to enter into a CSA under this tariff, and the Company shall have sole discretion to decline to provide any requested Resiliency Service Assets to any customers under this tariff.

⁶ Some resiliency projects, in particular Stand Alone Back-Up Generators, may not need to utilize a D&E phase, or may be able to use a more streamlined approach to this step in the project scoping process.

The CSA exists to document the project-specific terms of a customer's resiliency project. The CSA sets forth the agreed capital cost for each Resiliency Service Asset based on the RFP process and D&E Agreement (as applicable), any additional CIAC, and any applicable Allowance from the Company.⁷ The CSA will also outline the applicable carrying charges for each Resiliency Service Asset and the routine Operation and Maintenance ("O&M") of each Resiliency Service Asset. The CSA will also describe the customer's responsibility for non-routine O&M and replacement costs associated with Company-owned Resiliency Service Assets. Finally, the CSA will provide the program charge(s) and resiliency charge(s) along with applicable O&M charges for each Resiliency Service Asset. The CSA will be for a term of 10-years for all Resiliency Service Assets. Prior to Xcel Energy commencing construction of the Resiliency Assets, customer must approve construction drawings which may be modified with mutual consent of all parties.

Additionally, the CSA will serve as an O&M agreement between the Company and the customer describing the Resiliency Service Asset operation and maintenance parameters. Routine maintenance on Resiliency Service Assets will be conducted by the Company or its designee and will be conducted according to the agreed upon terms in the CSA. This maintenance agreement will cover malfunctioning or performance issues with equipment; however, the cost for all non-routine O&M as described in the CSA will be directly invoiced to the customer. The CSA will also describe the operation of each Resiliency Service Asset and to the extent dispatching, programming, or scheduling is required the terms of the CSA will reflect the mutually agreed upon operational plans between the Company and the customer.

Finally, the CSA will also serve as an asset ownership and transfer agreement between the Company and the customer describing the Resiliency Service Asset ownership and ownership-transfer at the end of the contract term, as described in more detail below.

Permitting, Interconnecting, and Compliance – Permitting, interconnection authorizations, and generation emissions compliance will be managed by the Company for applicable Company-owned Resiliency Service Assets. Compliance costs will be included in the Resiliency Charges within the RS-1 tariff either as capital or routine O&M expenses. The Company believes it is appropriate for compliance to be managed by the Company when Resiliency Service Assets are owned and operated by the Company. As described earlier, Company-owned Resiliency Service Assets requiring interconnection with the Company's distribution system will follow the same interconnection process and queue as customer interconnection projects.

Construction – Pursuant to the CSA, the Company and/or the selected vendor, as applicable, will construct the project, providing regular updates to the customer. Xcel Energy will undertake any distribution work pursuant to its normal processes for construction projects for new business or distribution upgrades.

O&M – Resiliency Service Assets will be used for the benefit of the customer that has contracted for those assets, and the Company will provide ongoing O&M as necessary and in accordance with the CSA, utilizing vendors for O&M services as needed. Regular reporting will be provided to the customer demonstrating the operation and maintenance of the Resiliency Service Assets in

⁷ Customers may elect to provide a CIAC for up to 100 percent of the capital cost of the Resiliency Service Assets. Resiliency projects may be eligible for distribution extension allowances under the extension rules.

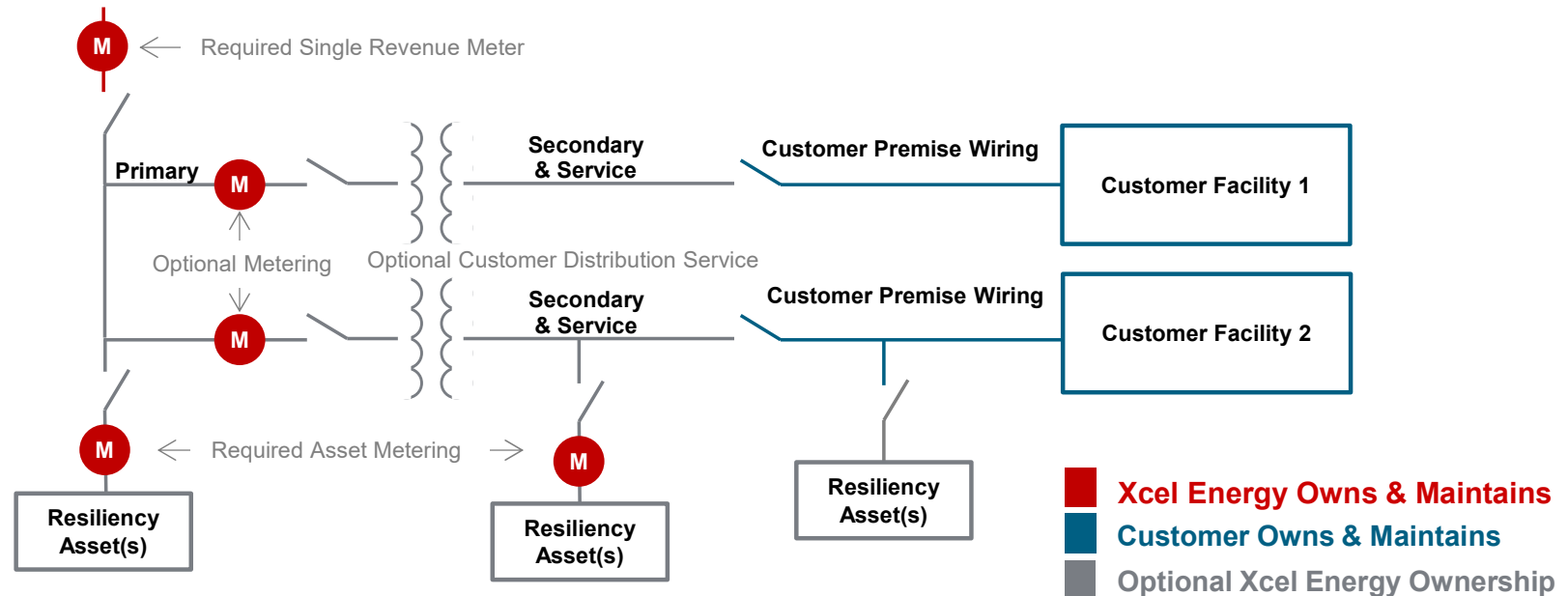
accordance with the customer's needs and CSA. If the customer requires operational or maintenance changes, amendments to the operation and maintenance agreement within the CSA may be made with mutual agreement between the parties.

End of Contract – As mentioned above, the CSA will serve as an asset ownership and transfer agreement between the Company and the customer describing the Resiliency Service Asset ownership and ownership-transfer at the end of the contract. The customer will be required to pay the Company for any undepreciated value for Resiliency Service Assets due to termination of the CSA prior to the end of its term.⁸ Once the customer has paid for any undepreciated value, the Company will transfer ownership of Resiliency Service Assets to the customer. If the customer wishes to have the Company remove, retire and/or decommission any Resiliency Service Assets at the end of the CSA term, the customer will also be responsible for all costs of removal net of salvage, retirement, and decommissioning.⁹

⁸ The Company will have the ability to terminate the CSA in the event of a material breach of the CSA by the customer. In that case the customer would be responsible to pay the remaining undepreciated balance associated with the Resiliency Service Assets, after which the Company will transfer ownership of the Resiliency Service Assets to the customer.

⁹ After the term of the CSA ends and the ownership of the Resiliency Service Assets has been transferred to the customer, the customer may have the option to continue Company operation of the Resiliency Service Asset by signing a new CSA for operation and maintenance or, depending on the availability of this or a variation of this program at that time, to have the Company replace the Resiliency Service Asset under a new CSA.

Multiple Premise Provision Example



GUNDERSEN

HEALTH SYSTEM®

December 1, 2020

Public Service Commission of Wisconsin
4822 Madison Yards Way
Madison, WI 53705

Re: Xcel Energy's Resiliency as a Service pilot program

As part of our mission, Gundersen Health System and our sustainability program, Gundersen Envision, prioritize health and well-being for our community through approaches to energy utilization that go hand-in-hand with solid, resilient business decisions. Like Gundersen, Xcel Energy, a national leader in the clean energy transition, is committed to partnering with consumers and communities to make resiliency convenient and affordable and help reduce carbon emissions. Gundersen supports this proposed program offered by Xcel Energy and are excited by the possibilities of the program to support the energy goals of organizations like ours.

Resiliency as a Service is a new product offering designed to support commercial and industrial customers with a need for higher than standard service reliability. Xcel Energy will provide this support through company ownership, installation, operation and maintenance of resiliency assets. Xcel Energy may own and/or maintain the assets while customers pay for them over time through charges on their bill. This innovative service will reduce upfront capital costs for consumers while providing a simple process through which to design and implement vital resiliency solutions.

The program is designed to be technology agnostic and will allow for consumers to choose resiliency options to best meet their needs. Consumers will work with Xcel Energy and a preferred set of vendors to design, construct and interconnect their system. This will allow for a single point of contact throughout the process, providing a simple and efficient consumer experience.

Gundersen Health System supports Xcel Energy's application to the Public Service Commission of Wisconsin requesting approval to offer the *Resiliency as a Service* pilot program. This program will simplify and lower costs for consumers looking for tailored resiliency solutions.

If you have any questions, please feel free to contact me at 608-775-0148 or cjzareck@gundersenhealth.org

Sincerely,





CITY OF LA CROSSE UTILITIES
WATER - SEWER - STORM

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Bernard N Lenz, P.E.

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To: Wisconsin Public Service Commission,

The City of La Crosse Utilities supports PSC approval of Xcel Energy's 'Resiliency as a Service pilot program', and specifically the use of microgrids to support energy sharing between multiple City properties not possible or feasible under current tariffs.

The use solar panels and methane powered engines for electric generation are planned or implemented at the Municipal service center and the Wastewater Treatment Plant on Isle La Plume. But the systems are far from optimized due to the *consume what you produce by property* approach currently driven by existing tariffs.

The City also has a municipal harbor, Houska Park, a dog park, and several ball fields, as well as leased property on the island. If these facilities could be included in the system optimization and the City and Xcel worked together to optimize production and use across a larger footprint, much more optimization and a higher degree of resiliency could be obtained. The area is perfect for the application of a micro grid for these facilities to share and back up each other's electrical needs.

We hope you support this pilot project. The Sanitary Sewer Utility is excited to work with Xcel on this micro grid concept on Isle La Plume.

Bernard N Lenz, PE
Utility Manager, City of La Crosse

**COMMUNITY DEVELOPMENT****Economic Development:** (715) 839-4914**Inspections:** (715) 839-4947**Planning:** (715) 839-4914**Fax:** (715) 839-4939

December 4, 2020

Steffany Powell Coker
Public Service Commission
P.O. Box 7854
Madison, WI 53707-7854

Re: Resiliency as a Service Pilot Program Filing

The City of Eau Claire offers our support on Xcel Energy's proposed new resiliency pilot program filing. The program will assist Xcel, businesses, institutions and industries to improve energy security, energy efficiency, load control and management while incorporating clean energy like solar.

Xcel is a strong community partner in the transition to a cleaner energy future to mitigate climate change and pollution. They are national leaders in renewables and continue to innovate their services to address customer needs and desires, while not sacrificing bottom line public safety, reliability and cost parity for all customers.

The City of Eau Claire has its own goals of carbon neutrality and 100% renewable energy by 2050 and programs like this provide us great options to leverage. For example, we have capital plans to use a micro-grid and solar at our water treatment plant, and have a planned community event emergency shelter for energy resiliency and meeting fundamental human needs.

This proposal gives customers options to choose from and lowers the burden of upfront costs and ownership by working with a trusted energy provider. The pilot is a good approach to work with early adopters and refine the program using any lessons learned. The program is what the State needs in order to advance its own carbon-free electricity goal meeting the Paris Agreement. It represents a sound approach that the PSC should approve.

Respectfully,

A handwritten signature in blue ink, appearing to read "Scott H. Allen".

Scott H. Allen, AICP
Director of Community Development